Table of Contents

Preface: General Chair xiii
Preface: Program Committee Co-Chairsxv
Organizersxvii
Program Committee
Conference Programxxv
Combination of Arabic Preprocessing Schemes for Statistical Machine Translation Fatiha Sadat and Nizar Habash
Going Beyond AER: An Extensive Analysis of Word Alignments and Their Impact on MT Necip Fazil Ayan and Bonnie J. Dorr
Unsupervised Topic Modelling for Multi-Party Spoken Discourse Matthew Purver, Konrad P. Körding, Thomas L. Griffiths and Joshua B. Tenenbaum
Minimum Cut Model for Spoken Lecture Segmentation Igor Malioutov and Regina Barzilay 25
Bootstrapping Path-Based Pronoun Resolution Shane Bergsma and Dekang Lin 33
Kernel-Based Pronoun Resolution with Structured Syntactic Knowledge Xiaofeng Yang, Jian Su and Chew Lim Tan
A Finite-State Model of Human Sentence Processing Jihyun Park and Chris Brew
Acceptability Prediction by Means of Grammaticality Quantification Philippe Blache, Barbara Hemforth and Stéphane Rauzy
Discriminative Word Alignment with Conditional Random Fields Phil Blunsom and Trevor Cohn
Named Entity Transliteration with Comparable Corpora Richard Sproat, Tao Tao and ChengXiang Zhai 73
<i>Extracting Parallel Sub-Sentential Fragments from Non-Parallel Corpora</i> Dragos Stefan Munteanu and Daniel Marcu
Estimating Class Priors in Domain Adaptation for Word Sense Disambiguation Yee Seng Chan and Hwee Tou Ng
Ensemble Methods for Unsupervised WSD Samuel Brody, Roberto Navigli and Mirella Lapata
Meaningful Clustering of Senses Helps Boost Word Sense Disambiguation Performance Roberto Navigli

<i>Espresso: Leveraging Generic Patterns for Automatically Harvesting Semantic Relations</i> Patrick Pantel and Marco Pennacchiotti	13
Modeling Commonality among Related Classes in Relation Extraction GuoDong Zhou, Jian Su and Min Zhang 12	21
Relation Extraction Using Label Propagation Based Semi-Supervised Learning Jinxiu Chen, Donghong Ji, Chew Lim Tan and Zhengyu Niu 12	29
Polarized Unification Grammars Sylvain Kahane 13	37
Partially Specified Signatures: A Vehicle for Grammar Modularity Yael Cohen-Sygal and Shuly Wintner	45
Morphology-Syntax Interface for Turkish LFG Özlem Çetinoğlu and Kemal Oflazer	53
 PCFGs with Syntactic and Prosodic Indicators of Speech Repairs John Hale, Izhak Shafran, Lisa Yung, Bonnie Dorr, Mary Harper, Anna Krasnyanskaya, Matthew Lease, Yang Liu, Brian Roark, Matthew Snover and Robin Stewart16 	61
Dependency Parsing of Japanese Spoken Monologue Based on Clause BoundariesTomohiro Ohno, Shigeki Matsubara, Hideki Kashioka, Takehiko Maruyama and YasuyoshiInagakiInagaki	69
Trace Prediction and Recovery with Unlexicalized PCFGs and Slash Features Helmut Schmid	77
Learning More Effective Dialogue Strategies Using Limited Dialogue Move Features Matthew Frampton and Oliver Lemon	85
Dependencies between Student State and Speech Recognition Problems in Spoken Tutoring Dialogues Mihai Rotaru and Diane J. Litman	93
<i>Learning the Structure of Task-Driven Human-Human Dialogs</i> Srinivas Bangalore, Giuseppe Di Fabbrizio and Amanda Stent	01
Semi-Supervised Conditional Random Fields for Improved Sequence Segmentation and Labeling Feng Jiao, Shaojun Wang, Chi-Hoon Lee, Russell Greiner and Dale Schuurmans20	09
Training Conditional Random Fields with Multivariate Evaluation Measures Jun Suzuki, Erik McDermott and Hideki Isozaki	17
Approximation Lasso Methods for Language Modeling Jianfeng Gao, Hisami Suzuki and Bin Yu	25
Automated Japanese Essay Scoring System based on Articles Written by Experts Tsunenori Ishioka and Masayuki Kameda	33
A Feedback-Augmented Method for Detecting Errors in the Writing of Learners of English Ryo Nagata, Atsuo Kawai, Koichiro Morihiro and Naoki Isu	41
Correcting ESL Errors Using Phrasal SMT Techniques Chris Brockett, William B. Dolan and Michael Gamon	49

Graph Transformations in Data-Driven Dependency Parsing Jens Nilsson, Joakim Nivre and Johan Hall
Learning to Generate Naturalistic Utterances Using Reviews in Spoken Dialogue Systems Ryuichiro Higashinaka, Rashmi Prasad and Marilyn A. Walker
Measuring Language Divergence by Intra-Lexical Comparison T. Mark Ellison and Simon Kirby 273
Enhancing Electronic Dictionaries with an Index Based on Associations Olivier Ferret and Michael Zock 281
Guiding a Constraint Dependency Parser with Supertags Kilian Foth, Tomas By and Wolfgang Menzel 289
Efficient Unsupervised Discovery of Word Categories Using Symmetric Patterns and High Frequency Words Dmitry Davidov and Ari Rappoport
Bayesian Query-Focused Summarization Hal Daumé III and Daniel Marcu 305
Expressing Implicit Semantic Relations without Supervision Peter D. Turney
Hybrid Parsing: Using Probabilistic Models as Predictors for a Symbolic Parser Kilian A. Foth and Wolfgang Menzel 321
<i>Error Mining in Parsing Results</i> Benoît Sagot and Éric de La Clergerie
Reranking and Self-Training for Parser Adaptation David McClosky, Eugene Charniak and Mark Johnson
Automatic Classification of Verbs in Biomedical Texts Anna Korhonen, Yuval Krymolowski and Nigel Collier
Selection of Effective Contextual Information for Automatic Synonym Acquisition Masato Hagiwara, Yasuhiro Ogawa and Katsuhiko Toyama
Scaling Distributional Similarity to Large Corpora James Gorman and James R. Curran
<i>Extractive Summarization using Inter- and Intra- Event Relevance</i> Wenjie Li, Mingli Wu, Qin Lu, Wei Xu and Chunfa Yuan
Models for Sentence Compression: A Comparison across Domains, Training Requirements and Evaluation Measures James Clarke and Mirella Lapata
A Bottom-Up Approach to Sentence Ordering for Multi-Document Summarization Danushka Bollegala, Naoaki Okazaki and Mitsuru Ishizuka
Learning Event Durations from Event Descriptions Feng Pan, Rutu Mulkar and Jerry R. Hobbs

Automatic Learning of Textual Entailments with Cross-Pair Similarities Fabio Massimo Zanzotto and Alessandro Moschitti 401
An Improved Redundancy Elimination Algorithm for Underspecified Representations Alexander Koller and Stefan Thater
Integrating Syntactic Priming into an Incremental Probabilistic Parser, with an Application to Psycholinguistic Modeling Amit Dubey, Frank Keller and Patrick Sturt
A Fast, Accurate Deterministic Parser for Chinese Mengqiu Wang, Kenji Sagae and Teruko Mitamura
<i>Learning Accurate, Compact, and Interpretable Tree Annotation</i> Slav Petrov, Leon Barrett, Romain Thibaux and Dan Klein
Semi-Supervised Learning of Partial Cognates Using Bilingual Bootstrapping Oana Frunza and Diana Inkpen
<i>Direct Word Sense Matching for Lexical Substitution</i> Ido Dagan, Oren Glickman, Alfio Gliozzo, Efrat Marmorshtein and Carlo Strapparava449
An Equivalent Pseudoword Solution to Chinese Word Sense Disambiguation Zhimao Lu, Haifeng Wang, Jianmin Yao, Ting Liu and Sheng Li
Improving the Scalability of Semi-Markov Conditional Random Fields for Named Entity Recognition Daisuke Okanohara, Yusuke Miyao, Yoshimasa Tsuruoka and Jun'ichi Tsujii
Factorizing Complex Models: A Case Study in Mention DetectionRadu Florian, Hongyan Jing, Nanda Kambhatla and Imed Zitouni473
Segment-Based Hidden Markov Models for Information Extraction Zhenmei Gu and Nick Cercone 481
A DOM Tree Alignment Model for Mining Parallel Data from the Web Lei Shi, Cheng Niu, Ming Zhou and Jianfeng Gao
QuestionBank: Creating a Corpus of Parse-Annotated QuestionsJohn Judge, Aoife Cahill and Josef van Genabith
Creating a CCGbank and a Wide-Coverage CCG Lexicon for German Julia Hockenmaier
Improved Discriminative Bilingual Word Alignment Robert C. Moore, Wen-tau Yih and Andreas Bode
Maximum Entropy Based Phrase Reordering Model for Statistical Machine Translation Deyi Xiong, Qun Liu and Shouxun Lin 521
Distortion Models for Statistical Machine Translation Yaser Al-Onaizan and Kishore Papineni
A Study on Automatically Extracted Keywords in Text Categorization Anette Hulth and Beáta B. Megyesi

A Comparison and Semi-Quantitative Analysis of Words and Character-Bigrams as Features in Chinese Text Categorization Jingyang Li, Maosong Sun and Xian Zhang	5
Exploiting Comparable Corpora and Bilingual Dictionaries for Cross-Language Text Categorization Alfio Gliozzo and Carlo Strapparava	3
A Progressive Feature Selection Algorithm for Ultra Large Feature Spaces Qi Zhang, Fuliang Weng and Zhe Feng	1
Annealing Structural Bias in Multilingual Weighted Grammar Induction Noah A. Smith and Jason Eisner	9
Maximum Entropy Based Restoration of Arabic Diacritics Imed Zitouni, Jeffrey S. Sorensen and Ruhi Sarikaya 57	7
An Iterative Implicit Feedback Approach to Personalized Search Yuanhua Lv, Le Sun, Junlin Zhang, Jian-Yun Nie, Wan Chen and Wei Zhang	5
The Effect of Translation Quality in MT-Based Cross-Language Information Retrieval Jiang Zhu and Haifeng Wang 593	3
A Comparison of Document, Sentence, and Term Event Spaces Catherine Blake	1
Tree-to-String Alignment Template for Statistical Machine Translation Yang Liu, Qun Liu and Shouxun Lin 609	9
Incorporating Speech Recognition Confidence into Discriminative Named Entity Recognition of Speech Data Katsuhito Sudoh, Hajime Tsukada and Hideki Isozaki	7
<i>Exploiting Syntactic Patterns as Clues in Zero-Anaphora Resolution</i> Ryu Iida, Kentaro Inui and Yuji Matsumoto	5
Self-Organizing n-gram Model for Automatic Word SpacingSeong-Bae Park, Yoon-Shik Tae and Se-Young Park632	3
Concept Unification of Terms in Different Languages for IR Qing Li, Sung-Hyon Myaeng, Yun Jin and Bo-yeong Kang	1
Word Alignment in English-Hindi Parallel Corpus Using Recency-Vector Approach: Some Studies Niladri Chatterjee and Saumya Agrawal	9
Extracting Loanwords from Mongolian Corpora and Producing a Japanese-Mongolian Bilingual Dictionary Badam-Osor Khaltar, Atsushi Fujii and Tetsuya Ishikawa	7
An Unsupervised Morpheme-Based HMM for Hebrew Morphological Disambiguation Meni Adler and Michael Elhadad	5
Contextual Dependencies in Unsupervised Word Segmentation Sharon Goldwater, Thomas L. Griffiths and Mark Johnson	3

MAGEAD: A Morphological Analyzer and Generator for the Arabic Dialects Nizar Habash and Owen Rambow 681
Noun Phrase Chunking in Hebrew: Influence of Lexical and Morphological Features Yoav Goldberg, Meni Adler and Michael Elhadad
Multi-Tagging for Lexicalized-Grammar Parsing James R. Curran, Stephen Clark and David Vadas 697
Guessing Parts-of-Speech of Unknown Words Using Global Information Tetsuji Nakagawa and Yuji Matsumoto
A Clustered Global Phrase Reordering Model for Statistical Machine Translation Masaaki Nagata, Kuniko Saito, Kazuhide Yamamoto and Kazuteru Ohashi
A Discriminative Global Training Algorithm for Statistical MT Christoph Tillmann and Tong Zhang
<i>Phoneme-to-Text Transcription System with an Infinite Vocabulary</i> Shinsuke Mori, Daisuke Takuma and Gakuto Kurata
Automatic Generation of Domain Models for Call-Centers from Noisy Transcriptions Shourya Roy and L Venkata Subramaniam
Proximity in Context: An Empirically Grounded Computational Model of Proximity for Processing Topological Spatial Expressions John D. Kelleher, Geert-Jan M. Kruijff and Fintan J. Costello
Machine Learning of Temporal Relations Inderjeet Mani, Marc Verhagen, Ben Wellner, Chong Min Lee and James Pustejovsky
An End-to-End Discriminative Approach to Machine Translation Percy Liang, Alexandre Bouchard-Côté, Dan Klein and Ben Taskar
Semi-Supervised Training for Statistical Word Alignment Alexander Fraser and Daniel Marcu 769
<i>Left-to-Right Target Generation for Hierarchical Phrase-Based Translation</i> Taro Watanabe, Hajime Tsukada and Hideki Isozaki
You Can't Beat Frequency (Unless You Use Linguistic Knowledge) – A Qualitative Evaluation of Association Measures for Collocation and Term Extraction Joachim Wermter and Udo Hahn
Ontologizing Semantic Relations Marco Pennacchiotti and Patrick Pantel
Semantic Taxonomy Induction from Heterogenous Evidence Rion Snow, Daniel Jurafsky and Andrew Y. Ng
Names and Similarities on the Web: Fact Extraction in the Fast Lane Marius Paşca, Dekang Lin, Jeffrey Bigham, Andrei Lifchits and Alpa Jain
Weakly Supervised Named Entity Transliteration and Discovery from Multilingual Comparable Corpora Alexandre Klementiev and Dan Roth

A Composite Kernel to Extract Relations between Entities with Both Flat and Structured Features Min Zhang, Jie Zhang, Jian Su and GuoDong Zhou	25
Japanese Dependency Parsing Using Co-Occurrence Information and a Combination of Case Elements	
Takeshi Abekawa and Manabu Okumura	3
Answer Extraction, Semantic Clustering, and Extractive Summarization for Clinical Question Answering Dina Demner-Fushman and Jimmy Lin	1
	•1
Discovering Asymmetric Entailment Relations between Verbs Using Selectional Preferences Fabio Massimo Zanzotto, Marco Pennacchiotti and Maria Teresa Pazienza	9
Event Extraction in a Plot Advice Agent Harry Halpin and Johanna D. Moore 85	7
An All-Subtrees Approach to Unsupervised Parsing Rens Bod	55
Advances in Discriminative Parsing Joseph Turian and I. Dan Melamed 87	'3
Prototype-Driven Grammar Induction Aria Haghighi and Dan Klein	31
Exploring Correlation of Dependency Relation Paths for Answer Extraction Dan Shen and Dietrich Klakow 88	19
Question Answering with Lexical Chains Propagating Verb Arguments Adrian Novischi and Dan Moldovan	17
Methods for Using Textual Entailment in Open-Domain Question Answering Sanda Harabagiu and Andrew Hickl 90)5
Using String-Kernels for Learning Semantic Parsers Rohit J. Kate and Raymond J. Mooney91	.3
A Bootstrapping Approach to Unsupervised Detection of Cue Phrase Variants Rashid M. Abdalla and Simone Teufel	!1
Semantic Role Labeling via FrameNet, VerbNet and PropBank Ana-Maria Giuglea and Alessandro Moschitti	:9
Multilingual Legal Terminology on the Jibiki Platform: The LexALP Project Gilles Sérasset, Francis Brunet-Manquat and Elena Chiocchetti 93	17
Leveraging Reusability: Cost-Effective Lexical Acquisition for Large-Scale Ontology Translation G. Craig Murray, Bonnie J. Dorr, Jimmy Lin, Jan Hajič and Pavel Pecina	5
Accurate Collocation Extraction Using a Multilingual Parser Violeta Seretan and Eric Wehrli	13
Scalable Inference and Training of Context-Rich Syntactic Translation Models Michel Galley, Jonathan Graehl, Kevin Knight, Daniel Marcu, Steve DeNeefe, Wei Wang and Ignacio Thayer	51

Modelling Lexical Redundancy for Machine Translation David Talbot and Miles Osborne 969
<i>Empirical Lower Bounds on the Complexity of Translational Equivalence</i> Benjamin Wellington, Sonjia Waxmonsky and I. Dan Melamed
A Hierarchical Bayesian Language Model Based On Pitman-Yor Processes Yee Whye Teh
A Phonetic-Based Approach to Chinese Chat Text Normalization Yunqing Xia, Kam-Fai Wong and Wenjie Li
Discriminative Pruning of Language Models for Chinese Word Segmentation Jianfeng Li, Haifeng Wang, Dengjun Ren and Guohua Li
Novel Association Measures Using Web Search with Double Checking Hsin-Hsi Chen, Ming-Shun Lin and Yu-Chuan Wei
Semantic Retrieval for the Accurate Identification of Relational Concepts in Massive Textbases Yusuke Miyao, Tomoko Ohta, Katsuya Masuda, Yoshimasa Tsuruoka, Kazuhiro Yoshida, Takashi Ninomiya and Jun'ichi Tsujii
<i>Exploring Distributional Similarity Based Models for Query Spelling Correction</i> Mu Li, Muhua Zhu, Yang Zhang and Ming Zhou
Robust PCFG-Based Generation Using Automatically Acquired LFG Approximations Aoife Cahill and Josef van Genabith 1033
Incremental Generation of Spatial Referring Expressions in Situated Dialog John D. Kelleher and Geert-Jan M. Kruijff
<i>Learning to Predict Case Markers in Japanese</i> Hisami Suzuki and Kristina Toutanova
Are These Documents Written from Different Perspectives? A Test of Different Perspectives Based on Statistical Distribution Divergence Wei-Hao Lin and Alexander Hauptmann
<i>Word Sense and Subjectivity</i> Janyce Wiebe and Rada Mihalcea
Improving QA Accuracy by Question Inversion John Prager, Pablo Duboue and Jennifer Chu-Carroll
Reranking Answers for Definitional QA Using Language Modeling Yi Chen, Ming Zhou and Shilong Wang 1081
Highly Constrained Unification Grammars Daniel Feinstein and Shuly Wintner 1089
A Polynomial Parsing Algorithm for the Topological Model: Synchronizing Constituent and Dependency Grammars, Illustrated by German Word Order Phenomena Kim Gerdes and Sylvain Kahane

Stochastic Language Generation Using WIDL-Expressions and its Application in Machine Translation and Summarization Radu Soricut and Daniel Marcu 1105
Learning to Say It Well: Reranking Realizations by Predicted Synthesis Quality Crystal Nakatsu and Michael White
An Effective Two-Stage Model for Exploiting Non-Local Dependencies in Named Entity Recognition Vijay Krishnan and Christopher D. Manning
Learning Transliteration Lexicons from the Web Jin-Shea Kuo, Haizhou Li and Ying-Kuei Yang
Punjabi Machine Transliteration M.G. Abbas Malik 1137
<i>Multilingual Document Clustering: An Heuristic Approach Based on Cognate Named Entities</i> Soto Montalvo, Raquel Martínez, Arantza Casillas and Víctor Fresno
<i>Time Period Identification of Events in Text</i> Taichi Noro, Takashi Inui, Hiroya Takamura and Manabu Okumura1153
Optimal Constituent Alignment with Edge Covers for Semantic Projection Sebastian Padó and Mirella Lapata 1161
Utilizing Co-Occurrence of Answers in Question Answering Min Wu and Tomek Strzalkowski Min Wu and Tomek Strzalkowski
Author Index

Preface: General Chair

I am honoured to write the first few words of these Proceedings, as General Chair of COLING/ACL 2006 in Sydney, Australia. As we know, this is just the third time in their history that the two traditionally major events in Computational Linguistics, COLING and ACL – organised respectively by ICCL (International Committee on Computational Linguistics) and ACL (the Association for Computational Linguistics) – are joined in one combined conference, after Stanford in 1984 and Montreal in 1998. I was lucky to attend both those wonderful events and would have never imagined to be "in charge" of the next one, the first of the new millennium!

When I accepted, I knew I didn't have real work to do in this position, apart from mediate – if necessary – among the several "real workers", the various Chairs. I must say now that my work was even easier than foreseen, because of the wonderful teamwork of all the COLING/ACL group.

In this joint Conference we have tried to maintain the spirit of both COLING and ACL, but the combination will inevitably have its own personality, in a mixture that is more than the simple sum of the two. Part of its character will be due to the location, for the first time – for both conferences – in Australia. For this reason we decided to have a member of AFNLP (the Asian Federation of Natural Language Processing) on the Advisory Board and to give particular attention and visibility to the Asia-Pacific context, communities and languages. We sincerely thank both the AFNLP-Nagao Fund for providing financial support for those presenting Asian NLP research, and ALTA (the Australasian Language Technology Association) for their local support.

It is my task here – but I should say my pleasure – to express gratitude to all those without whom this conference would not exist, and I think I can do that on behalf of all participants.

My biggest thanks go to all the Chairs, for their invaluable effort and dedication which made this Conference possible.

First of all the two Program Chairs: Claire Cardie and Pierre Isabelle, who did a tremendous job, managing so many submissions and taking care of both regular papers and posters, and the two Local Arrangements Chairs: Robert Dale and Cécile Paris, who have succeeded in keeping so many details under control, in such a smooth way as if everything were natural and effortless for them.

And all the others, for their precious, competent and hard work: the Workshops Chair: Suzanne Stevenson; the Student Workshop Chair: Rebecca Hwa; the Tutorials Chair: Claire Gardent; the Interactive Presentations Chair: James Curran; the Publications Chair: Olivia Kwong; the two Sponsorship Chairs: Steven Krauwer (International) and Dominique Estival (Australia); the Mentoring Chair: Richard Power, who kindly accepted to do this for the second time; the Publicity Chair: Tim Baldwin; the Exhibits Chair: Menno van Zaanen; the Student Volunteers coordinator: Priscilla Rasmussen, giving often advice to all of us as ACL business manager; the webmasters: Andrew Lampert and Brett Powley; and finally Judy Potter and her team from Well Done Events for managing registrations and assisting in the local organisation.

I warmly thank the Advisory Board – composed of four ICCL, four ACL, and one AFNLP members – to whom we resorted for suggestions on important and sometimes delicate issues: Sandra Carberry, Eva Hajicova, Aravind Joshi, Martin Kay, Kathleen McCoy, Martha Palmer, Priscilla Rasmussen, Benjamin T'sou, Jun'ichi Tsujii.

I express my gratitude to all the sponsors for their great support to the conference.

I thank all the organizers of the so numerous surrounding workshops, tutorials, and other co-located events – conferences, workshops, summer school – adding value to the main conference, creating

altogether probably the biggest ever happening in Computational Linguistics.

My thanks to the area chairs, the reviewers, the invited speakers, the authors of the various presentations, in particular the students who enter with enthusiasm in such an exciting field, all the participants who will often make a long trip to be present at COLING/ACL 2006, and all those who contributed in many ways to a success of the conference.

And I finally thank both ICCL and ACL for having decided to join forces again in such a great enterprise. COLING/ACL 2006 will be, I'm sure, an exciting, stimulating and inspiring event for all of you.

Enjoy COLING/ACL 2006! ... and consider that some of the youngest here do not know it yet, but they will be chairing the next joint events in a few years.

Nicoletta Calzolari COLING/ACL 2006 General Chair June 2006

Preface: Program Committee Co-Chairs

This conference represents just the third time in their 40+ year history that the two premier conferences in natural language processing, computational linguistics, and language technology have merged for a joint COLING/ACL event; and it's the first time that the joint conference will be held in the southern hemisphere. It is fitting then, that we received a record number of 630 submissions from 40+ countries: 39% from 13 countries in Asia, 29% from 17 countries in Europe, 25% from Canada and the United States, 4% from Australia and New Zealand, 2% from 4 countries in the Middle East, and less than 1% from South America (Brazil) and Africa (South Africa and Tunisia). Of the 630 submissions, 23% were accepted for paper presentations and an additional 20% for poster presentations.

Our rough estimate of the amount of work that went just into preparing the submissions, final versions and on-site presentations for this year's main program exceeds 32 person/years.¹ If we include workshops and EMNLP, this figure is probably doubled. Thanks to everyone who submitted their research to the conference!

Much of the work in putting together the main program of papers and posters was done, of course, by our tireless area chairs and reviewers (of which we had 19 and 384, respectively). A tribute to their joint efforts is the fact that we obtained a 100% response rate for reviews – over 100% actually, since a few crazy souls offered unsolicited or extra reviews.

COLING/ACL 2006 spans five days with the traditional COLING "excursion day" on day three. The remaining four days of the conference include plenary sessions, four parallel paper sessions, the student research workshop, and two evening poster sessions. The ACL Lifetime Achievement Award will also be bestowed on its fifth recipient in a plenary session, followed by an invited talk by the esteemed award winner. A Best Paper Award will be announced in a plenary session at the end of the conference. We would like to especially thank our two invited speakers, Daniel Marcu and Sally McConnell-Ginet.

In honor of the joint conference's location, we have planned a special Asian language event for Thursday morning that consists of paper presentations of the top four Asian language papers followed by a plenary panel focusing on issues in Asian language processing, and ending with the presentation of the Best Asian Language Paper Award. We offer special thanks to our three distinguished panelists – Pushpak Bhattacharyya, Benjamin T'sou, and Jun'ichi Tsujii – and to Aravind Joshi, who expertly organized the panel.

Finally, we thank the ACL and ICCL conference oversight committee, for advice of all sorts along the way; and Rich Gerber, the START conference system developer, who answered our countless questions at all hours of the day and night.

After all of this work, by so many people, we are very much looking forward to sitting back and enjoying the conference with you in Sydney in July!

Claire Cardie Pierre Isabelle June 2006

¹We assume an average of 8 days of work to prepare each one of about 630 submissions to the COLING-ACL 2006 main program; and an average of 5 days of work to produce final versions for each one of the 267 accepted contributions.

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Chris Callison-Burch, Jaime Carbonell, Xavier Carreras, Vitor Carvalho, Nuria Castell, Frantisek Cermak, Joyce Chai, Soumen Chakrabarti, Ciprian Chelba, Hsin-Hsi Chen, John Chen, Keh-Jiann Chen, Kuang-hua Chen, Lee-Feng Chien, Yejin Choi, Tat-Seng Chua, Ken Church, Stephen Clark, James Clarke, Michael Collins, Matteo Contolini, Koby Crammer, Mathias Creutz, Silviu Cucerzan, James Curran, Krzysztof Czuba

Walter Daelemans, Ido Dagan, Hal Daume III, Renato DeMori, Barbara Di Eugenio, Mona Diab, Christy Doran, Mark Dras, Amit Dubey, Kevin Duh

Noemie Elhadad, Katrin Erk, Andrea Esuli, Yair Even-Zohar

Marcello Federico, Christiane Fellbaum, Radu Florian, George Forman, George Foster, Anette Frank, Robert Frank, Alex Fraser, Dayne Freitag, Sadaoki Furui

Evgeniy Gabrilovich, Jianfeng Gao, Eric Gaussier, Mark Gawron, Ruifang Ge, Effi Georgala, Mazin Gilbert, Roxana Girju, Oren Glickman, Jade Goldstein, Yifan Gong, Silke Goronzy, Cyril Goutte, Gregory Grefenstette, Ralph Grishman

Nizar Habash, Udo Hahn, Thomas Hain, Jan Hajic, Keith Hall, Sanda Harabagiu, Mary Harper, James Henderson, John Henderson, Erhard Hinrichs, Graeme Hirst, Barbora Hladka, Julia Hockenmaier, Veronique Hoste, Shu-Kai Hsieh, Fei Huang, Liang Huang

Nancy Ide, Kentaro Inui, Hitoshi Isahara, Hideki Isozaki, Abe Ittycheriah

Paul Jacobs, Nathalie Japkowicz, Donghong Ji, Rong Jin, Hongyan Jing, Howard Johnson, Michael Johnston, Rosie Jones, Jean-Claude Junqua

Kyo Kageura, Laura Kallmeyer, Nanda Kambhatla, Noriko Kando, Boris Katz, Asanee Kawtrakul, Martin Kay, Frank Keller, Rodger Kibble, Adam Kilgarriff, Tracy Hooloway King, Alexandra Kinyon, Katrin Kirchhoff, Dan Klein, Kevin Knight, Alistair Knott, Philipp Koehn, Moshe Koppel, Kimmo Koskenniemi, Taku Kudo, Peter Kuehnlein, Jonas Kuhn, Roland Kuhn, Shankar Kumar, Oren Kurland, Sadao Kurohashi, K L Kwok, Olivia Kwong

Tom Lai, Irene Langkilde-Geary, Philippe Langlais, Mirella Lapata, Alex Lascarides, Alberto Lavelli, Alon Lavie, Victor Lavrenko, Guy Lebanon, Gary (Geunbae) Lee, Jong-Hyeok Lee, Young-Suk Lee, Oliver Lemon, Alessandro Lenci, Piroska Lendvai, David Lewis, Hang Li, Mu Li, Xin Li, Liz Liddy, Chin-Yew Lin, Jimmy Lin, Ken Litkowski, Bing Liu, Beth Logan, Marketa Lopatkova, Adam Lopez, Yajuan Lu, Xiaoqiang Luo

Qing Ma, Bente Maegaard, Milind Mahajan, Steve Maiorano, Rob Malouf, Daniel Marcu, Mitch Marcus, Katja Markert, Lluis Marquez, Erwin Marsi, Yuji Matsumoto, John Maxwell, Andrew McCallum, Diana McCarthy, Kathleen McCoy, Ryan McDonald, Dan Melamed, Helen Meng, Wolfgang Menzel, Paola Merlo, Detmar Meurers, Adam Meyers, Rada Mihalcea, Natasa Milic-Frayling, Eleni Miltsakaki, Ruslan Mitkov, Mandar Mitra, Vibhu Mittal, Yusuke Miyao, Dunja Mladenic, Dan Moldovan, Monica Monachini, Christof Monz, Johanna Moore, Alessandro Moschitti, Isabelle Moulinier, Dragos Munteanu, Masaki Murata

Masaaki Nagata, Sobha L Nair, Hiroshi Nakagawa, Satoshi Nakamura, Srini Narayanan, Wuritu Nashun, Roberto Navigli, Hermann Ney, Vincent Ng, Patrick Nguyen, Nicolas Nicolov, Jian-Yun Nie, Kamal Nigam, Takashi Ninomiya, Malvina Nissim, Cheng Niu, Zheng-Yu Niu, Joakim Nivre, Eric Nyberg

Jon Oberlander, Franz Och, Stephan Oepen, Kemal Oflazer, Miles Osborne

Petr Pajas, Karel Pala, Martha Palmer, Jarmila Panevova, Bo Pang, Patrick Pantel, Fuchun Peng, Gerald Penn, Vladimqr Petkevic, Fabio Pianesi, Paul Piwek, Massimo Poesio, Patrice Pognan, Ana-Maria Popescu, Andrei Popescu-Belis, Richard Power, Sameer Pradhan, John Prange, Rashmi Prasad, Detlef Prescher, Laurent Prevot, Katharina Probst, Gabor Proszeky, Josef Psutka

Yan Qu

Owen Rambow, Alan Ramsay, Philip Resnik, Stefan Riezler, German Rigau, Hae-Chang Rim, Brian Roark, Rick Rose, Alex Rudnicky, Pavel Rychly

Carl Sable, Louisa Sadler, Kenji Sagae, Antonio Sanfilippo, Rajeev Sangal, Sunita Sarawagi, Giorgio Satta, Michael Schiehlen, Frank Schilder, Helmut Schmid, Hinrich Schuetze, Tanja Schultz, Holger Schwenk, Donia Scott, Jiri Semecky, Petr Sgall, Fei Sha, Vijay Shanker, Dipti M Sharma, Libin Shen, Xiaodong Shi, Atsushi Shimojima, Luo Si, Advaith Siddharthan, Khalil Simaan, Man-Hung Siu, David Smith, Noah Smith, Harold Somers, Virach Sornlertlamvanich, Karen Sparck-Jones, Rohini Srihari, Manfred Stede, Mark Steedman, Amanda Stent, Suzanne Stevenson, Matthew Stone, Veselin Stoyanov, Carlo Strapparava, Tomek Strzalkowski, Jian Su, Keh-Yih Su, Maosong Sun, Mihai Surdeanu, Jun Suzuki, Marc Swerts

Hiroya Takamura, Marta Tatu, Thanaruk Theeramunkong, Mariet Theune, Christoph Tillmann, Takenobu Tokunaga, Andrew Tomkins, Kristina Toutanova, David Traum, Huihsin Tseng, Benjamin Tsou, Dan Tufis, Peter Turney

Kiyotaka Uchimoto, Nicola Ueffing, Takehito Utsuro

Antal van den Bosch, Josef van Genabith, Gertjan van Noord, Lucy Vanderwende, Hans vanHalteren, Ashish Venugopal, Peter Veprek, Stephan Vogel, Piek Vossen

Marilyn Walker, Shaojun Wang, Wei Wang, Xiaolong Wang, Ye-Yi Wang, Andy Way, Bonnie Webber, David Weir, Michael White, Ed Whittaker, Richard Wicentowski, Jan Wiebe, Yorick Wilks, Theresa Wilson, Shuly Wintner, Dekai Wu, Xiaoyuan Wu, Yunfang Wu

Fei Xia, Peng Xu

Z Zabokrtsky, Fabio Massimo Zanzotto, Daniel Zeman, Richard Zens, Hao Zhang, Tong Zhang, Yi Zhang, Ying Zhang, GuoDong Zhou, Jingbo Zhu, Imed Zitouni

Conference Program

Monday, 17 July 2006

09:00-09:30

	Session 1A: Machine Translation I
09:30-10:00	<i>Combination of Arabic Preprocessing Schemes for Statistical Machine Translation</i> Fatiha Sadat and Nizar Habash
10:00–10:30	Going Beyond AER: An Extensive Analysis of Word Alignments and Their Impact on MT Necip Fazil Ayan and Bonnie J. Dorr
	Session 1B: Topic Segmentation
09:30–10:00	<i>Unsupervised Topic Modelling for Multi-Party Spoken Discourse</i> Matthew Purver, Konrad P. Körding, Thomas L. Griffiths and Joshua B. Tenenbaum
10:00-10:30	Minimum Cut Model for Spoken Lecture Segmentation

Opening Session

Session 1C: Coreference

09:30–10:00 *Bootstrapping Path-Based Pronoun Resolution* Shane Bergsma and Dekang Lin

Igor Malioutov and Regina Barzilay

10:00–10:30 *Kernel-Based Pronoun Resolution with Structured Syntactic Knowledge* Xiaofeng Yang, Jian Su and Chew Lim Tan

Session 1D: Grammars I

- 09:30–10:00 *A Finite-State Model of Human Sentence Processing* Jihyun Park and Chris Brew
- 10:00–10:30 Acceptability Prediction by Means of Grammaticality Quantification Philippe Blache, Barbara Hemforth and Stéphane Rauzy
- 10:30–11:00 Break

Monday, 17 July 2006 (continued)

Session 2A: Machine Translation II

- 11:00–11:30 *Discriminative Word Alignment with Conditional Random Fields* Phil Blunsom and Trevor Cohn
- 11:30–12:00 *Named Entity Transliteration with Comparable Corpora* Richard Sproat, Tao Tao and ChengXiang Zhai
- 12:00–12:30 *Extracting Parallel Sub-Sentential Fragments from Non-Parallel Corpora* Dragos Stefan Munteanu and Daniel Marcu

Session 2B: Word Sense Disambiguation I

- 11:00–11:30 *Estimating Class Priors in Domain Adaptation for Word Sense Disambiguation* Yee Seng Chan and Hwee Tou Ng
- 11:30–12:00Ensemble Methods for Unsupervised WSDSamuel Brody, Roberto Navigli and Mirella Lapata
- 12:00–12:30 *Meaningful Clustering of Senses Helps Boost Word Sense Disambiguation Performance* Roberto Navigli

Session 2C: Information Extraction I

- 11:00–11:30 *Espresso: Leveraging Generic Patterns for Automatically Harvesting Semantic Relations* Patrick Pantel and Marco Pennacchiotti
- 11:30–12:00 *Modeling Commonality among Related Classes in Relation Extraction* GuoDong Zhou, Jian Su and Min Zhang
- 12:00–12:30 *Relation Extraction Using Label Propagation Based Semi-Supervised Learning* Jinxiu Chen, Donghong Ji, Chew Lim Tan and Zhengyu Niu

Session 2D: Grammars II

- 11:00–11:30 *Polarized Unification Grammars* Sylvain Kahane
- 11:30–12:00 *Partially Specified Signatures: A Vehicle for Grammar Modularity* Yael Cohen-Sygal and Shuly Wintner
- 12:00–12:30 *Morphology-Syntax Interface for Turkish LFG* Özlem Çetinoğlu and Kemal Oflazer
- 12:30-14:00 Lunch

Monday, 17 July 2006 (continued)

Session 3A: Parsing I

- 14:00–14:30 PCFGs with Syntactic and Prosodic Indicators of Speech Repairs
 John Hale, Izhak Shafran, Lisa Yung, Bonnie Dorr, Mary Harper, Anna Krasnyanskaya,
 Matthew Lease, Yang Liu, Brian Roark, Matthew Snover and Robin Stewart
- 14:30–15:00 *Dependency Parsing of Japanese Spoken Monologue Based on Clause Boundaries* Tomohiro Ohno, Shigeki Matsubara, Hideki Kashioka, Takehiko Maruyama and Yasuyoshi Inagaki
- 15:00–15:30 *Trace Prediction and Recovery with Unlexicalized PCFGs and Slash Features* Helmut Schmid

Session 3B: Dialogue I

- 14:00–14:30 *Learning More Effective Dialogue Strategies Using Limited Dialogue Move Features* Matthew Frampton and Oliver Lemon
- 14:30–15:00 Dependencies between Student State and Speech Recognition Problems in Spoken Tutoring Dialogues Mihai Rotaru and Diane J. Litman
- 15:00–15:30 *Learning the Structure of Task-Driven Human-Human Dialogs* Srinivas Bangalore, Giuseppe Di Fabbrizio and Amanda Stent

Session 3C: Machine Learning Methods I

14:00–14:30 Semi-Supervised Conditional Random Fields for Improved Sequence Segmentation and Labeling

Feng Jiao, Shaojun Wang, Chi-Hoon Lee, Russell Greiner and Dale Schuurmans

- 14:30–15:00 *Training Conditional Random Fields with Multivariate Evaluation Measures* Jun Suzuki, Erik McDermott and Hideki Isozaki
- 15:00–15:30 *Approximation Lasso Methods for Language Modeling* Jianfeng Gao, Hisami Suzuki and Bin Yu

Session 3D: Applications I

- 14:00–14:30 Automated Japanese Essay Scoring System based on Articles Written by Experts Tsunenori Ishioka and Masayuki Kameda
- 14:30–15:00 *A Feedback-Augmented Method for Detecting Errors in the Writing of Learners of English* Ryo Nagata, Atsuo Kawai, Koichiro Morihiro and Naoki Isu
- 15:00–15:30 *Correcting ESL Errors Using Phrasal SMT Techniques* Chris Brockett, William B. Dolan and Michael Gamon
- 15:30–16:00 Break

Monday, 17 July 2006 (continued)

Session 4A: Parsing II

16:00–16:30 *Graph Transformations in Data-Driven Dependency Parsing* Jens Nilsson, Joakim Nivre and Johan Hall

Session 4B: Dialogue II

16:00–16:30 *Learning to Generate Naturalistic Utterances Using Reviews in Spoken Dialogue Systems* Ryuichiro Higashinaka, Rashmi Prasad and Marilyn A. Walker

Session 4C: Linguistic Kinships

16:00–16:30 *Measuring Language Divergence by Intra-Lexical Comparison* T. Mark Ellison and Simon Kirby

Session 4D: Applications II

- 16:00–16:30 *Enhancing Electronic Dictionaries with an Index Based on Associations* Olivier Ferret and Michael Zock
- 16:30–17:30 ACL Lifetime Achievement Award
- 17:30–19:30 Poster Sessions

Tuesday, 18 July 2006

09:00–10:00 Invited Talk by Daniel Marcu: Argmax Search in Natural Language Processing

Session 5A: Parsing III

10:00–10:30 *Guiding a Constraint Dependency Parser with Supertags* Kilian Foth, Tomas By and Wolfgang Menzel

Session 5B: Lexical Issues I

10:00–10:30 *Efficient Unsupervised Discovery of Word Categories Using Symmetric Patterns and High Frequency Words* Dmitry Davidov and Ari Rappoport

Session 5C: Summarization I

10:00–10:30 *Bayesian Query-Focused Summarization* Hal Daumé III and Daniel Marcu

Session 5D: Semantics I

- 10:00–10:30 *Expressing Implicit Semantic Relations without Supervision* Peter D. Turney
- 10:30-11:00 Break

Tuesday, 18 July 2006 (continued)

Session 6A: Parsing IV

- 11:00–11:30 *Hybrid Parsing: Using Probabilistic Models as Predictors for a Symbolic Parser* Kilian A. Foth and Wolfgang Menzel
- 11:30–12:00 *Error Mining in Parsing Results* Benoît Sagot and Éric de La Clergerie
- 12:00–12:30 *Reranking and Self-Training for Parser Adaptation* David McClosky, Eugene Charniak and Mark Johnson

Session 6B: Lexical Issues II

- 11:00–11:30 *Automatic Classification of Verbs in Biomedical Texts* Anna Korhonen, Yuval Krymolowski and Nigel Collier
- 11:30–12:00 *Selection of Effective Contextual Information for Automatic Synonym Acquisition* Masato Hagiwara, Yasuhiro Ogawa and Katsuhiko Toyama
- 12:00–12:30 *Scaling Distributional Similarity to Large Corpora* James Gorman and James R. Curran

Session 6C: Summarization II

- 11:00–11:30 *Extractive Summarization using Inter- and Intra- Event Relevance* Wenjie Li, Mingli Wu, Qin Lu, Wei Xu and Chunfa Yuan
- 11:30–12:00 Models for Sentence Compression: A Comparison across Domains, Training Requirements and Evaluation Measures James Clarke and Mirella Lapata
- 12:00–12:30 A Bottom-Up Approach to Sentence Ordering for Multi-Document Summarization Danushka Bollegala, Naoaki Okazaki and Mitsuru Ishizuka

Session 6D: Semantics II

- 11:00–11:30 *Learning Event Durations from Event Descriptions* Feng Pan, Rutu Mulkar and Jerry R. Hobbs
- 11:30–12:00 *Automatic Learning of Textual Entailments with Cross-Pair Similarities* Fabio Massimo Zanzotto and Alessandro Moschitti
- 12:00–12:30 An Improved Redundancy Elimination Algorithm for Underspecified Representations Alexander Koller and Stefan Thater
- 12:30–14:00 Lunch

Tuesday, 18 July 2006 (continued)

Session 7A: Parsing V

- 14:00–14:30 Integrating Syntactic Priming into an Incremental Probabilistic Parser, with an Application to Psycholinguistic Modeling Amit Dubey, Frank Keller and Patrick Sturt
- 14:30–15:00 *A Fast, Accurate Deterministic Parser for Chinese* Mengqiu Wang, Kenji Sagae and Teruko Mitamura
- 15:00–15:30 *Learning Accurate, Compact, and Interpretable Tree Annotation* Slav Petrov, Leon Barrett, Romain Thibaux and Dan Klein

Session 7B: Word Sense Disambiguation II

- 14:00–14:30 *Semi-Supervised Learning of Partial Cognates Using Bilingual Bootstrapping* Oana Frunza and Diana Inkpen
- 14:30–15:00 *Direct Word Sense Matching for Lexical Substitution* Ido Dagan, Oren Glickman, Alfio Gliozzo, Efrat Marmorshtein and Carlo Strapparava
- 15:00–15:30 An Equivalent Pseudoword Solution to Chinese Word Sense Disambiguation Zhimao Lu, Haifeng Wang, Jianmin Yao, Ting Liu and Sheng Li

Session 7C: Information Extraction II

- 14:00–14:30 Improving the Scalability of Semi-Markov Conditional Random Fields for Named Entity Recognition Daisuke Okanohara, Yusuke Miyao, Yoshimasa Tsuruoka and Jun'ichi Tsujii
- 14:30–15:00 *Factorizing Complex Models: A Case Study in Mention Detection* Radu Florian, Hongyan Jing, Nanda Kambhatla and Imed Zitouni
- 15:00–15:30 *Segment-Based Hidden Markov Models for Information Extraction* Zhenmei Gu and Nick Cercone

Session 7D: Resources I

- 14:00–14:30 *A DOM Tree Alignment Model for Mining Parallel Data from the Web* Lei Shi, Cheng Niu, Ming Zhou and Jianfeng Gao
- 14:30–15:00 *QuestionBank: Creating a Corpus of Parse-Annotated Questions* John Judge, Aoife Cahill and Josef van Genabith
- 15:00–15:30 *Creating a CCGbank and a Wide-Coverage CCG Lexicon for German* Julia Hockenmaier
- 15:30–16:00 Break

Tuesday, 18 July 2006 (continued)

Session 8A: Machine Translation III

- 16:00–16:30 *Improved Discriminative Bilingual Word Alignment* Robert C. Moore, Wen-tau Yih and Andreas Bode
- 16:30–17:00 *Maximum Entropy Based Phrase Reordering Model for Statistical Machine Translation* Deyi Xiong, Qun Liu and Shouxun Lin
- 17:00–17:30 *Distortion Models for Statistical Machine Translation* Yaser Al-Onaizan and Kishore Papineni

Session 8B: Text Classification I

- 16:00–16:30 A Study on Automatically Extracted Keywords in Text Categorization Anette Hulth and Beáta B. Megyesi
- 16:30–17:00 A Comparison and Semi-Quantitative Analysis of Words and Character-Bigrams as Features in Chinese Text Categorization Jingyang Li, Maosong Sun and Xian Zhang
- 17:00–17:30 *Exploiting Comparable Corpora and Bilingual Dictionaries for Cross-Language Text Categorization* Alfio Gliozzo and Carlo Strapparava

Session 8C: Machine Learning Methods II

- 16:00–16:30 *A Progressive Feature Selection Algorithm for Ultra Large Feature Spaces* Qi Zhang, Fuliang Weng and Zhe Feng
- 16:30–17:00 Annealing Structural Bias in Multilingual Weighted Grammar Induction Noah A. Smith and Jason Eisner
- 17:00–17:30 *Maximum Entropy Based Restoration of Arabic Diacritics* Imed Zitouni, Jeffrey S. Sorensen and Ruhi Sarikaya

Session 8D: Information Retrieval I

- 16:00–16:30 An Iterative Implicit Feedback Approach to Personalized Search Yuanhua Lv, Le Sun, Junlin Zhang, Jian-Yun Nie, Wan Chen and Wei Zhang
- 16:30–17:00 *The Effect of Translation Quality in MT-Based Cross-Language Information Retrieval* Jiang Zhu and Haifeng Wang
- 17:00–17:30 *A Comparison of Document, Sentence, and Term Event Spaces* Catherine Blake
- 17:30–19:30 Poster Sessions

Thursday, 20 July 2006

Session 9A: Best Asian Language Paper Nominee

09:00–09:30 *Tree-to-String Alignment Template for Statistical Machine Translation* Yang Liu, Qun Liu and Shouxun Lin

Session 9B: Best Asian Language Paper Nominee

09:00–09:30 Incorporating Speech Recognition Confidence into Discriminative Named Entity Recognition of Speech Data Katsuhito Sudoh, Hajime Tsukada and Hideki Isozaki

Session 9C: Best Asian Language Paper Nominee

09:00–09:30 *Exploiting Syntactic Patterns as Clues in Zero-Anaphora Resolution* Ryu Iida, Kentaro Inui and Yuji Matsumoto

Session 9D: Best Asian Language Paper Nominee

- 09:00–09:30 *Self-Organizing n-gram Model for Automatic Word Spacing* Seong-Bae Park, Yoon-Shik Tae and Se-Young Park
- 09:30–10:30 Asian Language Special Event: Challenges in NLP: Some New Perspectives from the East
- 10:30-11:00 Break

Thursday, 20 July 2006 (continued)

Session 10A: Asian Language Processing

- 11:00–11:30 *Concept Unification of Terms in Different Languages for IR* Qing Li, Sung-Hyon Myaeng, Yun Jin and Bo-yeong Kang
- 11:30–12:00 Word Alignment in English-Hindi Parallel Corpus Using Recency-Vector Approach: Some Studies Niladri Chatterjee and Saumya Agrawal
- 12:00–12:30 Extracting Loanwords from Mongolian Corpora and Producing a Japanese-Mongolian Bilingual Dictionary Badam-Osor Khaltar, Atsushi Fujii and Tetsuya Ishikawa

Session 10B: Morphology and Word Segmentation

- 11:00–11:30 An Unsupervised Morpheme-Based HMM for Hebrew Morphological Disambiguation Meni Adler and Michael Elhadad
- 11:30–12:00 *Contextual Dependencies in Unsupervised Word Segmentation* Sharon Goldwater, Thomas L. Griffiths and Mark Johnson
- 12:00–12:30 *MAGEAD: A Morphological Analyzer and Generator for the Arabic Dialects* Nizar Habash and Owen Rambow

Session 10C: Tagging and Chunking

- 11:00–11:30 *Noun Phrase Chunking in Hebrew: Influence of Lexical and Morphological Features* Yoav Goldberg, Meni Adler and Michael Elhadad
- 11:30–12:00 *Multi-Tagging for Lexicalized-Grammar Parsing* James R. Curran, Stephen Clark and David Vadas
- 12:00–12:30 *Guessing Parts-of-Speech of Unknown Words Using Global Information* Tetsuji Nakagawa and Yuji Matsumoto
- 12:30-13:30 Lunch
- 13:30–14:30 ACL Business Meeting

Thursday, 20 July 2006 (continued)

Session 11A: Machine Translation IV

- 14:30–15:00 *A Clustered Global Phrase Reordering Model for Statistical Machine Translation* Masaaki Nagata, Kuniko Saito, Kazuhide Yamamoto and Kazuteru Ohashi
- 15:00–15:30 *A Discriminative Global Training Algorithm for Statistical MT* Christoph Tillmann and Tong Zhang

Session 11B: Speech

- 14:30–15:00 *Phoneme-to-Text Transcription System with an Infinite Vocabulary* Shinsuke Mori, Daisuke Takuma and Gakuto Kurata
- 15:00–15:30 *Automatic Generation of Domain Models for Call-Centers from Noisy Transcriptions* Shourya Roy and L Venkata Subramaniam

Session 11C: Discourse

- 14:30–15:00 Proximity in Context: An Empirically Grounded Computational Model of Proximity for Processing Topological Spatial Expressions John D. Kelleher, Geert-Jan M. Kruijff and Fintan J. Costello
- 15:00–15:30 *Machine Learning of Temporal Relations* Inderjeet Mani, Marc Verhagen, Ben Wellner, Chong Min Lee and James Pustejovsky
- 15:30-16:00 Break

Thursday, 20 July 2006 (continued)

Session 12A: Machine Translation V

- 16:00–16:30 An End-to-End Discriminative Approach to Machine Translation Percy Liang, Alexandre Bouchard-Côté, Dan Klein and Ben Taskar
- 16:30–17:00 *Semi-Supervised Training for Statistical Word Alignment* Alexander Fraser and Daniel Marcu
- 17:00–17:30 *Left-to-Right Target Generation for Hierarchical Phrase-Based Translation* Taro Watanabe, Hajime Tsukada and Hideki Isozaki

Session 12B: Lexical Issues III

- 16:00–16:30 You Can't Beat Frequency (Unless You Use Linguistic Knowledge) A Qualitative Evaluation of Association Measures for Collocation and Term Extraction Joachim Wermter and Udo Hahn
- 16:30–17:00 *Ontologizing Semantic Relations* Marco Pennacchiotti and Patrick Pantel
- 17:00–17:30 *Semantic Taxonomy Induction from Heterogenous Evidence* Rion Snow, Daniel Jurafsky and Andrew Y. Ng

Session 12C: Information Extraction III

- 16:00–16:30 *Names and Similarities on the Web: Fact Extraction in the Fast Lane* Marius Paşca, Dekang Lin, Jeffrey Bigham, Andrei Lifchits and Alpa Jain
- 16:30–17:00 Weakly Supervised Named Entity Transliteration and Discovery from Multilingual Comparable Corpora Alexandre Klementiev and Dan Roth
- 17:00–17:30 A Composite Kernel to Extract Relations between Entities with Both Flat and Structured Features Min Zhang, Jie Zhang, Jian Su and GuoDong Zhou

Friday, 21 July 2006

9:00–10:00 Invited Talk by Sally McConnell-Ginet: Language, Gender and Sexuality: Do Bodies Always Matter?

Session 13A: Parsing VI

10:00–10:30 Japanese Dependency Parsing Using Co-Occurrence Information and a Combination of Case Elements Takeshi Abekawa and Manabu Okumura

Session 13B: Question Answering I

10:00–10:30 Answer Extraction, Semantic Clustering, and Extractive Summarization for Clinical Question Answering Dina Demner-Fushman and Jimmy Lin

Session 13C: Semantics III

10:00–10:30 Discovering Asymmetric Entailment Relations between Verbs Using Selectional Preferences
 Fabio Massimo Zanzotto, Marco Pennacchiotti and Maria Teresa Pazienza

Session 13D: Applications III

- 10:00–10:30 *Event Extraction in a Plot Advice Agent* Harry Halpin and Johanna D. Moore
- 10:30–11:00 Break

Friday, 21 July 2006 (continued)

Session 14A: Parsing VII

- 11:00–11:30 An All-Subtrees Approach to Unsupervised Parsing Rens Bod
- 11:30–12:00 *Advances in Discriminative Parsing* Joseph Turian and I. Dan Melamed
- 12:00–12:30 *Prototype-Driven Grammar Induction* Aria Haghighi and Dan Klein

Session 14B: Question Answering II

- 11:00–11:30 *Exploring Correlation of Dependency Relation Paths for Answer Extraction* Dan Shen and Dietrich Klakow
- 11:30–12:00 *Question Answering with Lexical Chains Propagating Verb Arguments* Adrian Novischi and Dan Moldovan
- 12:00–12:30 *Methods for Using Textual Entailment in Open-Domain Question Answering* Sanda Harabagiu and Andrew Hickl

Session 14C: Semantics IV

- 11:00–11:30 Using String-Kernels for Learning Semantic Parsers Rohit J. Kate and Raymond J. Mooney
- 11:30–12:00 *A Bootstrapping Approach to Unsupervised Detection of Cue Phrase Variants* Rashid M. Abdalla and Simone Teufel
- 12:00–12:30 *Semantic Role Labeling via FrameNet, VerbNet and PropBank* Ana-Maria Giuglea and Alessandro Moschitti

Session 14D: Resources II

- 11:00–11:30 *Multilingual Legal Terminology on the Jibiki Platform: The LexALP Project* Gilles Sérasset, Francis Brunet-Manquat and Elena Chiocchetti
- 11:30–12:00 Leveraging Reusability: Cost-Effective Lexical Acquisition for Large-Scale Ontology Translation
 G. Craig Murray, Bonnie J. Dorr, Jimmy Lin, Jan Hajič and Pavel Pecina
- 12:00–12:30 Accurate Collocation Extraction Using a Multilingual Parser Violeta Seretan and Eric Wehrli
- 12:30–14:00 Lunch

Friday, 21 July 2006 (continued)

Session 15A: Machine Translation VI

- 14:00–14:30 *Scalable Inference and Training of Context-Rich Syntactic Translation Models* Michel Galley, Jonathan Graehl, Kevin Knight, Daniel Marcu, Steve DeNeefe, Wei Wang and Ignacio Thayer
- 14:30–15:00 *Modelling Lexical Redundancy for Machine Translation* David Talbot and Miles Osborne
- 15:00–15:30 *Empirical Lower Bounds on the Complexity of Translational Equivalence* Benjamin Wellington, Sonjia Waxmonsky and I. Dan Melamed

Session 15B: Language Modeling

- 14:00–14:30 *A Hierarchical Bayesian Language Model Based On Pitman-Yor Processes* Yee Whye Teh
- 14:30–15:00 *A Phonetic-Based Approach to Chinese Chat Text Normalization* Yunqing Xia, Kam-Fai Wong and Wenjie Li
- 15:00–15:30 *Discriminative Pruning of Language Models for Chinese Word Segmentation* Jianfeng Li, Haifeng Wang, Dengjun Ren and Guohua Li

Session 15C: Information Retrieval II

- 14:00–14:30 *Novel Association Measures Using Web Search with Double Checking* Hsin-Hsi Chen, Ming-Shun Lin and Yu-Chuan Wei
- 14:30–15:00 Semantic Retrieval for the Accurate Identification of Relational Concepts in Massive Textbases
 Yusuke Miyao, Tomoko Ohta, Katsuya Masuda, Yoshimasa Tsuruoka, Kazuhiro Yoshida, Takashi Ninomiya and Jun'ichi Tsujii
- 15:00–15:30 *Exploring Distributional Similarity Based Models for Query Spelling Correction* Mu Li, Muhua Zhu, Yang Zhang and Ming Zhou

Session 15D: Generation I

- 14:00–14:30 *Robust PCFG-Based Generation Using Automatically Acquired LFG Approximations* Aoife Cahill and Josef van Genabith
- 14:30–15:00 Incremental Generation of Spatial Referring Expressions in Situated Dialog John D. Kelleher and Geert-Jan M. Kruijff
- 15:00–15:30 *Learning to Predict Case Markers in Japanese* Hisami Suzuki and Kristina Toutanova
- 15:30–16:00 Break

Friday, 21 July 2006 (continued)

Session 16A: Text Classification II

- 16:00–16:30 Are These Documents Written from Different Perspectives? A Test of Different Perspectives Based on Statistical Distribution Divergence Wei-Hao Lin and Alexander Hauptmann
- 16:30–17:00 *Word Sense and Subjectivity* Janyce Wiebe and Rada Mihalcea

Session 16B: Question Answering III

- 16:00–16:30 *Improving QA Accuracy by Question Inversion* John Prager, Pablo Duboue and Jennifer Chu-Carroll
- 16:30–17:00 *Reranking Answers for Definitional QA Using Language Modeling* Yi Chen, Ming Zhou and Shilong Wang

Session 16C: Grammars III

- 16:00–16:30 *Highly Constrained Unification Grammars* Daniel Feinstein and Shuly Wintner
- 16:30–17:00 A Polynomial Parsing Algorithm for the Topological Model: Synchronizing Constituent and Dependency Grammars, Illustrated by German Word Order Phenomena Kim Gerdes and Sylvain Kahane

Session 16D: Generation II

- 16:00–16:30 Stochastic Language Generation Using WIDL-Expressions and its Application in Machine Translation and Summarization Radu Soricut and Daniel Marcu
- 16:30–17:00 *Learning to Say It Well: Reranking Realizations by Predicted Synthesis Quality* Crystal Nakatsu and Michael White
- 17:00–17:30 Closing Session